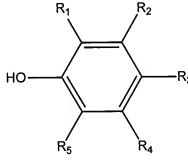
## LISTING OF THE CLAIMS

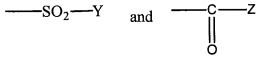
The claims are listed below as a courtesy to the Examiner. No amendment is made to the claims.

Claim 1 (**Previously Presented**). A molecular compound selected from the group consisting of hydrates, solvates, adducts, and clathrate compounds prepared by the method of reacting a phenol derivative represented by Formula (I)




(I)

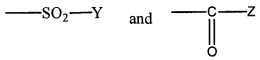
wherein $R_1$ and $R_5$ are same or different selected from the group consisting of hydrogen, halogen, alkyl having 1 to 4 carbons, alkenyl having 2 to 4 carbons, alkoxy having 1 to 4 carbons,




wherein Y is selected from the group consisting of alkyl having 1 to 8 carbons, alkenyl having 2 to 8 carbons, alkoxy having 1 to 6 carbons, substituted amino, substituted cycloalkyl, substituted phenyl and substituted aralkyl

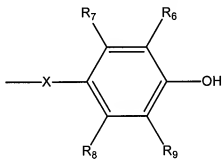
Z is selected from the group consisting of alkyl having 1 to 8 carbons, alkenyl having 2 to 8 carbons, alkoxy having 1 to 6 carbons, hydroxyl, substituted amino, substituted cycloalkyl, substituted phenyl and substituted aralkyl;

$R_2$ and $R_4$ are same or different selected from the group consisting of hydrogen, halogen, alkyl having 1 to 4 carbons, alkenyl having 2 to 4 carbons, alkoxy having 1 to 4 carbons, and hydroxyl, or, when $R_1$, $R_3$ or $R_5$ is alkoxy having 1 to 4 carbons or hydroxyl, $R_2$ and $R_4$ are same or different selected from the group consisting of hydrogen, halogen, alkyl having 1 to 4 carbons, alkenyl having 2 to 4 carbons, alkoxy having 1 to 4 carbons, hydroxyl,

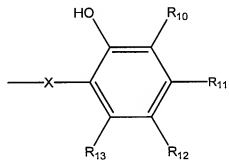


wherein Y and Z are as defined above;

$R_3$ is selected from the group consisting of hydrogen, halogen, alkyl having 1 to 4 carbons, alkenyl having 2 to 4 carbons, alkoxy having 1 to 4 carbons, hydroxyl, Formula (II), Formula (III), —$SO_2$—Y, and —C(=O)—Z, wherein Y and Z are as defined above,

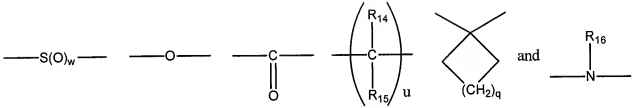


(II)



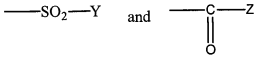
(III)

X is selected from the group consisting of



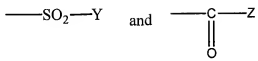

wherein w is 0, 1 or 2; u is 0 or 1; q is 0 to 4; $R_{14}$ and $R_{15}$ are same or different selected from the group consisting of hydrogen, halogen, alkyl having 1 to 4 carbons, alkenyl having 2 to 4 carbons, alkoxy having 1 to 4 carbons, hydroxyl, optionally substituted phenyl and optionally substituted aralkyl; $R_{16}$ is selected from the group consisting of hydrogen, alkyl having 1 to 4 carbons, alkenyl having 2 to 4 carbons, alkoxy having 1 to 4 carbons, hydroxyl, substituted phenyl and substituted aralkyl;

$R_6$, $R_9$ and $R_{10}$ are same or different selected from the group consisting of hydrogen, halogen, alkyl having 1 to 4 carbons, alkenyl having 2 to 4 carbons, alkoxy having 1 to 4 carbons, hydroxyl,

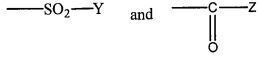



wherein Y and Z are as defined above;

$R_7$, $R_8$, $R_{11}$, and $R_{13}$ are same or different selected from the group consisting of hydrogen, halogen, alkyl having 1 to 4 carbons, alkenyl having 2 to 4 carbons, alkoxy having 1 to 4 carbons and hydroxyl, but when $R_{12}$ is alkoxy having 1 to 4 carbons or hydroxyl, $R_{11}$ is selected from the group consisting of hydrogen, halogen, alkyl having 1 to 4 carbons, alkenyl having 2 to 4 carbons, alkoxy having 1 to 4 carbons, hydroxyl,

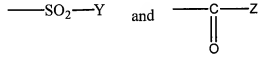


wherein Y and Z are as defined above; $R_{12}$ is selected from the group consisting of hydrogen, halogen, alkyl having 1 to 4 carbons, alkenyl having 2 to 4 carbons, alkoxy having 1 to 4 carbons, hydroxyl,

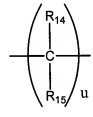


wherein Y and Z are as defined above, provided that

when $R_3$ is of Formula (II), one of $R_1$, $R_5$, $R_6$, and $R_9$ is selected from the group consisting of



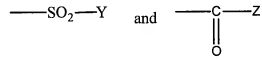
wherein Y and Z are as defined above, in which, when X is



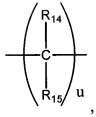
,

at least one of $R_1$, $R_2$, $R_4$, $R_5$, $R_6$, $R_7$, $R_8$, and $R_9$ is $—SO_2—Y$, and

when $R_3$ is of Formula (III), at least one of $R_1$, $R_5$, and $R_{10}$ is selected from the group consisting of



in which, when X is




,

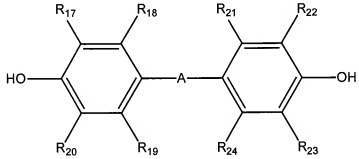
at least one of $R_1$, $R_2$, $R_4$, $R_5$, $R_{10}$, $R_{11}$, $R_{12}$, and $R_{13}$ is $—SO_2—Y$,

wherein Y and Z are as defined above, and

when $R_3$ is selected from a group other than the group consisting of Formula (II) and (III), either of $R_1$ or $R_5$ is $—SO_2—Y$ wherein Y is as defined above, and

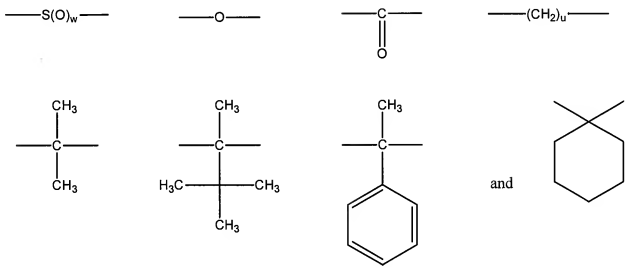
an organic compound under conditions sufficient to form the molecular compound selected from the group consisting of hydrates, solvates, adducts, and clathrate compounds having the phenol derivative as a constituent, the constituent being a host.

Claim 2 (**Previously Presented**). A molecular compound selected from the group consisting of hydrates, solvates, adducts, and clathrate compounds prepared by the method of reacting a phenol derivative represented by Formula (IV)




(IV)

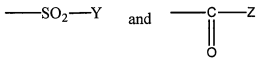
wherein A is selected from the group consisting of




wherein w is 0, 1 or 2 and u is 0 or 1;

$R_{18}$, $R_{19}$, $R_{21}$ and $R_{24}$ are same or different selected from the group consisting of hydrogen, halogen, alkyl having 1 to 4 carbons and alkenyl having 2 to 4 carbons;

$R_{17}$ is selected from the group consisting of




wherein Y and Z are selected from the group consisting of

alkyl having 1 to 6 carbons,

alkenyl having 2 to 6 carbons,

cyclohexyl optionally substituted with alkyl having 1 to 4 carbons or alkenyl having 2 to 4 carbons or alkoxy having 1 to 4 carbons or hydroxyl or halogen,

cyclopentyl optionally substituted with alkyl having 1 to 4 carbons or alkenyl having 2 to 4 carbons or alkoxy having 1 to 4 carbons or hydroxyl or halogen,

phenyl optionally substituted with alkyl having 1 to 4 carbons or alkenyl having 2 to 4 carbons or alkoxy having 1 to 4 carbons or halogen,

benzyl optionally substituted with alkyl having 1 to 4 carbons or alkenyl having 2 to 4 carbons or alkoxy having 1 to 4 carbons or hydroxyl or halogen,

phenethyl optionally substituted with alkyl having 1 to 4 carbons or alkenyl having 2 to 4 carbons or alkoxy having 1 to 4 carbons or hydroxyl or halogen,

α–methylbenzyl optionally substituted with alkyl having 1 to 4 carbons or alkenyl having 2 to 4 carbons or alkoxy having 1 to 4 carbons or hydroxyl or halogen, and

naphthyl optionally substituted with alkyl having 1 to 4 carbons or alkenyl having 2 to 4 carbons or alkoxy having 1 to 4 carbons or hydroxyl or halogen, and

$R_{20}$, $R_{22}$, and $R_{23}$ are same or different selected from the group consisting of hydrogen, halogen, alkyl having 1 to 4 carbons, alkenyl having 2 to 4 carbons, alkoxy having 1 to 4 carbons, —$SO_2$—Y, and —C(=O)—Z, wherein Y and Z are as defined above, and

when A is

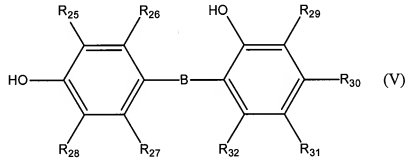


,

at least one of $R_{17}$, $R_{20}$, $R_{22}$, and $R_{23}$ is —$SO_2$—Y wherein Y is as defined above, and

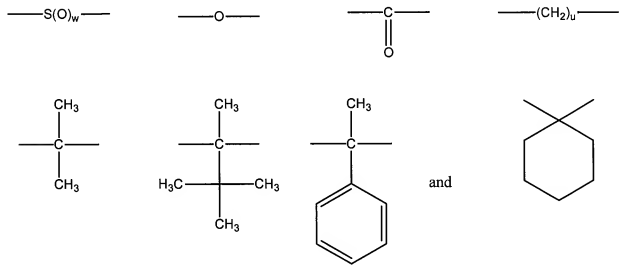
an organic compound as the other reactant under conditions sufficient to form the molecular compound selected from the group consisting of hydrates, solvates, adducts, and clathrate compounds having the phenol derivative as a constituent, the constituent being a host.

Claim 3 (**Previously Presented**). A molecular compound selected from the group consisting of hydrates, solvates, adducts, and clathrate compounds prepared by the method of reacting a phenol derivative represented by Formula (V)




(V)

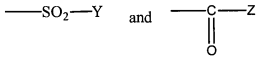
wherein B is selected from the group consisting of




wherein w is 0, 1 or 2 and u is 0 or 1;

$R_{26}$, $R_{27}$, $R_{30}$ and $R_{32}$ are same or different selected from the group consisting of hydrogen, halogen, alkyl having 1 to 4 carbons and alkenyl having 2 to 4 carbons;

$R_{25}$, $R_{28}$, $R_{29}$, and $R_{31}$ are same or different selected from the group consisting of hydrogen, halogen, alkyl having 1 to 4 carbons, alkenyl having 2 to 4 carbons, alkoxy having 1 to 4 carbons,



wherein Y and Z are selected from the group consisting of

alkyl having 1 to 6 carbons,

alkenyl having 2 to 6 carbons,

cyclohexyl which may have alkyl having 1 to 4 carbons or alkenyl having 2 to 4 carbons or alkoxy having 1 to 4 carbons or hydroxyl or halogen,

cyclopentyl which may have alkyl having 1 to 4 carbons or alkenyl having 2 to 4 carbons or alkoxy having 1 to 4 carbons or hydroxyl or halogen,

phenyl which may have alkyl having 1 to 4 carbons or alkenyl having 2 to 4 carbons or alkoxy having 1 to 4 carbons or halogen,

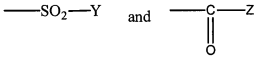
benzyl which may have alkyl having 1 to 4 carbons or alkenyl having 2 to 4 carbons or alkoxy having 1 to 4 carbons or hydroxyl or halogen,

phenethyl which may have alkyl having 1 to 4 carbons or alkenyl having 2 to 4 carbons or alkoxy having 1 to 4 carbons or hydroxyl or halogen,

α–methylbenzyl which may have alkyl having 1 to 4 carbons or alkenyl having 2 to 4 carbons or alkoxy having 1 to 4 carbons or hydroxyl or halogen, and

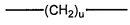
naphthyl which may have alkyl having 1 to 4 carbons or alkenyl having 2 to 4 carbons or alkoxy having 1 to 4 carbons or hydroxyl or halogen, and

at least one of $R_{25}$, $R_{28}$ and $R_{29}$ is selected from the group consisting of



wherein Y and Z are as defined above, and

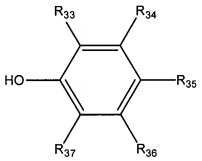
when B is



at least one of $R_{25}$, $R_{28}$, $R_{29}$, and $R_{31}$ is $—SO_2—Y$ wherein Y is as defined above, and

an organic compound as the second reactant under conditions sufficient to form the molecular compound selected from the group consisting of hydrates, solvates, adducts, and clathrate compounds having the phenol derivative as a constituent, the constituent being a host.

Claim 4 (**Previously Presented**). A molecular compound selected from the group consisting of hydrates, solvates, adducts, and clathrate compounds prepared by the method of reacting a phenol derivative represented by Formula (VI)



(VI)

wherein $R_{33}$ is $—SO_2—Y$

wherein Y is selected from the group consisting of

alkyl having 1 to 6 carbons,

alkenyl having 2 to 6 carbons,

cyclohexyl optionally substituted with alkyl having 1 to 4 carbons or alkenyl having 2 to 4 carbons or alkoxy having 1 to 4 carbons or hydroxyl or halogen,

cyclopentyl optionally substituted with alkyl having 1 to 4 carbons or alkenyl having 2 to 4 carbons or alkoxy having 1 to 4 carbons or hydroxyl or halogen,

phenyl optionally substituted with alkyl having 1 to 4 carbons or alkenyl having 2 to 4 carbons or alkoxy having 1 to 4 carbons or halogen,

benzyl optionally substituted with alkyl having 1 to 4 carbons or alkenyl having 2 to 4 carbons or alkoxy having 1 to 4 carbons or hydroxyl or halogen,

phenethyl optionally substituted with alkyl having 1 to 4 carbons or alkenyl having 2 to 4 carbons or alkoxy having 1 to 4 carbons or hydroxyl or halogen,

α–methylbenzyl optionally substituted with alkyl having 1 to 4 carbons or alkenyl having 2 to 4 carbons or alkoxy having 1 to 4 carbons or hydroxyl or halogen, and

naphthyl optionally substituted with alkyl having 1 to 4 carbons or alkenyl having 2 to 4 carbons or alkoxy having 1 to 4 carbons or hydroxyl or halogen, and

$R_{34}$, $R_{35}$, $R_{36}$ and $R_{37}$ are same or different selected from the group consisting of hydrogen, alkyl having 1 to 4 carbons, alkenyl having 2 to 4 carbons, alkoxy having 1 to 4 carbons, hydroxyl, halogen and —$SO_2$—Y, wherein Y is as defined above,

with an organic compound as the second reactant under conditions sufficient to form the molecular compound selected from the group consisting of hydrates, solvates, adducts, and clathrate compounds having the phenol derivative as a constituent, the constituent being a host.

Claims 5-15 (**Cancelled**).

Claim 16 (**Previously Presented**). A molecular compound comprising:

the phenol derivative represented by Formula (I) as defined in Claim 1; and

a material that reacts with the phenol derivative to form a molecular compound, the material selected from the group consisting of antibacterial agents, antifungal agents, insecticides, noxious insect repellants, perfumes, deodorants, antifouling agents, curing agents for coating materials, accelerators for coating materials, resins, adhesives, natural essential oils, antioxidants, vulcanization accelerators and organic solvents.

Claim 17 (**Previously Presented**). A molecular compound comprising:

the phenol derivative represented by Formula (IV) as defined in Claim 2; and

a material that reacts with the phenol derivative to form a molecular compound, the material selected from the group consisting of antibacterial agents, antifungal agents, insecticides, noxious insect repellants, perfumes, deodorants, antifouling agents, curing agents for coating materials, accelerators for coating materials, resins, adhesives, natural essential oils, antioxidants, vulcanization accelerators and organic solvents.

Claim 18 (**Previously Presented**). A molecular compound comprising:

the phenol derivative represented by Formula (V) as defined in Claim 3; and

a material that reacts with the phenol derivative to form a molecular compound, the material selected from the group consisting of antibacterial agents, antifungal agents, insecticides, noxious insect repellants, perfumes, deodorants, antifouling agents, curing agents for coating materials, accelerators for coating materials, resins, adhesives, natural essential oils, antioxidants, vulcanization accelerators and organic solvents.

Claim 19 (**Previously Presented**). A molecular compound comprising:

the phenol derivative represented by Formula (VI) as defined in Claim 4; and

a material that reacts with the phenol derivative to form a molecular compound, the material selected from the group consisting of antibacterial agents, antifungal agents, insecticides, noxious insect repellants, perfumes, deodorants, antifouling agents, curing agents for coating materials, accelerators for coating materials, resins, adhesives, natural essential oils, antioxidants, vulcanization accelerators and organic solvents.

Claims 20-31 (**Cancelled**).